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V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into Bayou Blue, thence into Bayou Nezpique in segment 050304 of the Mermentau River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 050304 of the Mermentau River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 050304	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 050304 of the Mermentau River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. Total Maximum Daily Loadings Studies (TMDLs) have been completed for the Mermentau River Basin to address impaired waterbodies. The cause of impairment for Subsegment 050304 is dissolved oxygen.

The *Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Wasteload Allocations for Nine Treatment Facilities* was developed for subsegments of the Mermentau River including 050403 and the Town of Elton. The TMDL goal is to maintain a 3 mg/l dissolved oxygen concentration during the summer season (March – November) and a 5 mg/l dissolved oxygen concentration during the winter season (December-February). To achieve this, an 85-90% reduction from man-made nonpoint sources was assumed by the model. This resulted in the imposition of seasonal limits for the Town of Elton and other municipalities. These limits were contained in the previous permit and are proposed for its reissuance.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 050304 of the Mermentau River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

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VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits (March-November):****OUTFALL 001**

Effluent limits are based on the *Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Wasteload Allocations for Nine Treatment Facilities* and are the same as those in the previous permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	13.9	5 mg/l	7.5 mg/l	Limits are set in accordance with the Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Nine Treatment Facilities (October, 1999)

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
TSS	41.7	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	5.6	2 mg/l	4 mg/l	Limits are set in accordance with the Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Nine Treatment Facilities (October, 1999)
Dissolved Oxygen	N/A	6.0 mg/l	N/A	Limits are set in accordance with the Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Nine Treatment Facilities (October, 1999)

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

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3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits (December-February):

OUTFALL 001

Effluent limits are based on the *Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Wasteload Allocations for Nine Treatment Facilities* and are the same as those in the previous permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	27.8	10 mg/l	15 mg/l	Limits are set in accordance with the Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Nine Treatment Facilities (October, 1999)
TSS	41.7	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	27.8	10 mg/l	20 mg/l	Limits are set in accordance with the Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Nine Treatment Facilities (October, 1999)
Dissolved Oxygen	N/A	5.0 mg/l	N/A	Limits are set in accordance with the Bayou Nezpique Watershed TMDL for Dissolved Oxygen Including Nine Treatment Facilities (October, 1999)

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

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**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0061719: Issued: November 1, 2003

Expired: October 31, 2008

Interim Effluent Limits

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement</u>	<u>Sample</u>
<u>Frequency</u>	<u>Type</u>			
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia nitrogen	Report mg/l	Report mg/l	2/month	Grab
Dissolved oxygen	---	Report mg/l	2/month	Grab
Fecal coliform	200 mg/l	400 mg/l	2/month	Grab
pH	---	---	2/month	Grab

Final Effluent Limits

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement</u>	<u>Sample</u>
<u>Frequency</u>	<u>Type</u>			
Flow	Report	Report	Continuous	Recorder
CBOD ₅				
March-November	5 mg/l	7.5 mg/l	2/month	Grab
December-February	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab

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Ammonia-Nitrogen				
March-November	2 mg/l	4 mg/l	2/month	Grab
December-February	10 mg/l	20 mg/l	2/month	Grab
Dissolved oxygen				
March-November	---	6 mg/l	2/month	Grab
December-February	---	5 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH	---	---	2/month	Grab

The permit contains biomonitoring.

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following most recent inspection was performed this facility.

Date: March 19, 2007

Inspector: Kevin Natali

Findings and/or Violations:

1. Fecal coliform and TSS exceedences (5) were observed from the file review.
2. Influent flow was reported above capacity on several DMRs.
3. The operator is not certified yet; certified operator from the Town of Kinder is contracted until certification is obtained for the operator.
4. I&I smoke testing was conducted 2/2005. Nearly 100 point sources found. 80% private individuals have been fixed, 100% of Town's major point sources repaired, 50% of moderate point source repaired.
5. Flow meter was calibrated 9/2006.

B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January, 2006 through December, 2007 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Fecal coliform	001	May, 2006	400	>1000
TSS	001	June, 2006	15 mg/l	22 mg/l
			23 mg/l	46 mg/l
Fecal coliform	001	December, 2006	400	>1000
Fecal coliform	001	February, 2007	400	>1000
TSS	001	April, 2007	15 mg/l	19 mg/l
			23 mg/l	34 mg/l
CBOD	001	July, 2007	5 mg/l	13 mg/l
			7.5 mg/l	19 mg/l
TSS	001	July, 2007	15 mg/l	34 mg/l
			23 mg/l	38 mg/l

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Ammonia	001	July, 2007	2 mg/l 4 mg/l	17.4 mg/l 17.6 mg/l
CBOD	001	August, 2007	5 mg/l 7.5 mg/l	17 mg/l 25 mg/l
TSS	001	August, 2007	15 mg/l 23 mg/l	20 mg/l 26 mg/l
Ammonia	001	August, 2007	2 mg/l 4 mg/l	11.7 mg/l 15.6 mg/l

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2707.C, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.333 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD: } 8.34 \text{ lb/gal} \times 0.333 \text{ MGD} \times 10 \text{ mg/l} = 27.8 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the proposed permit.

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Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Elton, Town of Elton Wastewater Treatment Facility, March 18, 2008.

	Flow		CBOD	TSS	Ammonia	DO	Fecal Coliform	pH	
Mar-Nov	Report	Report	5	7.5	23	4	6	400	9.0
Dec-Feb	Report	Report	10	15	23	20	5	400	9.0
DATE									
Jan, 2006	0.142	0.196	2	2	8	0.4	7	<10	6.61
Feb, 2006	0.157	0.243	4	4	6	7.1	6.9	<10	6.37
Mar, 2006	0.1	0.1446	3	3	9	<0.4	6.7	<10	6.8
April, 2006	0.109	0.18	2	2	15	<0.4	6.2	100 >1000	6.77
May, 2006	0.091	0.115	2	2 <3	0.5	0.5	6.7	100 >1000	6.83
June, 2006	0.076	0.092	3	4	46	<0.4	6.1	<10	6.77
July, 2006	0.139	0.24	2	2	11	<0.4	6.9	<10	6.72
Aug, 2006	0.33	1.158	5	8	21	0.5	6.2	<10	6.81
Sept, 2006	0.092	0.112	2	2	4	<0.4	6.4	<10	6.81
Oct, 2006	0.172	0.28	2	2	3	0.4	6.7	10	6.51
Nov, 2006	0.142	0.24	<2	<2	5	<0.4	6.3	10	6.65
Dec, 2006	0.176	0.324	2	2	13	<0.4	6.9	100 >1000	6.76
Jan, 2007	0.213	0.356	2	2	7	<0.4	7.6	40	6.68
Feb, 2007	0.135	0.152	2	2	7	<0.4	7.9	100 >1000	6.41
Mar, 2007	0.094	0.122	2	2	7	<0.4	6.7	<10	6.74
April, 2007	0.134	0.206	3	4	34	0.5	7.2	10	6.68
May, 2007	0.114	0.207	<2	<2	4	<0.4	6.3	<10	6.74
June, 2007	0.178	0.244	4	6 <3	<3	<0.4	6.4	<10	6.27
July, 2007	0.202	0.227	13	19	38	17.4	6	<10	6.92
Aug, 2007	0.091	0.268	17	25	26	11.7	5.9	<10	6.9
Sept, 2007	0.127	0.22	5	7 <3	<3	0.5	6.3	<10	6.74
Oct, 2007	0.082	0.096	4	5	5	<0.4	6.9	<10	6.81
Nov, 2007	0.18	0.297	2	2	4	0.4	6.9	<10	6.78
Dec, 2007	0.207	0.362	2	2	5	0.4	6.3	35	6.67

